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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,543	09/12/2003	David C. Fischer		6417

7590 06/01/2006

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New York, NY 10023

EXAMINER	
COURSON, TANIA C	
ART UNIT	PAPER NUMBER
2859	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/660,543	FISCHER, DAVID C.	
	Examiner	Art Unit	
	Tania C. Courson	2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 March 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3, 5-11 and 14-17* is/are pending in the application.

4a) Of the above claim(s) *6,7,14 and 15* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,8-11,16 and 17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 September 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *30MAY06*.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Please see attached interview, dated May 30, 2006, it clarifies the claim language and numbering of the Amendment filed March 13, 2006 in order to avoid an unresponsive Amendment. Specifically, the amended claim language of claims 1 and 17 are clarified and claims 4 and 12-13 are cancelled.

Election/Restrictions

2. Applicant's election without traverse of Group I (species shown in Fig. 1), during a telephone conversation on February 10, 2005 is acknowledged.

The requirement is still deemed proper and is therefore made FINAL.

3. Accordingly, claims 6-7 and 14-15 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected group, there being no allowable generic or linking claim.

With claims 4 and 12-13 being cancelled, thus claims 1-3, 5, 8-11 and 16-17 will be further examined in this action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 5, 9-10 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bell (US 3,791,042).

Bell disclose in Figures 1-7, an measuring apparatus and associated method comprising:

With respect to claims 1-2, 5 and 9-10:

a) a member (37) movable along said arcuate path corresponding to a position along said path (Fig. 4) corresponding to the relative position of the object (Fig. 1), a plurality of spaced electrical contacts insulated from one another and positioned along said path (34), data-storing means operatively connected to said plurality of contacts said data-storing means including a corresponding plurality of memory locations (column 2, lines 54-59), each of which stores a preset, different distance-measurement data and each of which is respectively operatively connected to one of said plurality of contacts (column 4, lines 36-57), each of said distance-measurement data stored respectively in said plurality of memory locations being uniquely respectively associated with on of said plurality of contacts along said path to which said memory location is operatively respectively connected and output means operatively connected to said data-storing means (column 4, lines 36-57), said movable member being effective as it moves along said path to engage one of said contacts thereby to cause the distance-measurement data stored in the one of said memory

locations then operatively connected to said one of said contacts to be applied to said output means (column 4, lines 36-57);

b) in which said output means is a display device (column 4, lines 36-57);

c) in which said movable member is connected at one of its ends to a voltage source (Fig. 7) and its other free end is movable along said arcuate path to make electrical contact with one of said contacts (Fig. 7)

d) further comprising a voltage source (Fig. 7), said member being effective when in electrical engagement with one of said contacts to place an associated one of said memory locations in a circuit arrangement with said voltage source (Fig. 7).

With respect to method steps of claim 17:

a) arranging a plurality of fixed, spaced and insulated electrical contacts along at least one side of said arcuate path (34), moving an electrically conductive member (37) along said path by an amount representative of the relative movement of the object (Fig. 4), thereby causing said movable member to make electrical contact with one of said contacts (Fig. 4), storing respectively a corresponding plurality of different preset distance measurement data in a corresponding plurality of data-storing locations in a memory respectively operatively connected to said plurality of contacts (column 4, lines 36-57), the distance measurement data stored in said plurality of data-storing locations being respectivley uniquely associated with one of said plurality of contacts

then contacted by said movable member to be applied to an ouput device (column 4, lines 36-57).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 8, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bell in view of Noy et al. (US 5,821,414).

Bell discloses a measuring apparatus and associated method, as stated above in paragraph 5.

Bell et al. do not disclose in which an output means is a CPU and in which data-storing means is a ROM.

Noy et al. teach a measuring apparatus and method that consists of in which an output means is a CPU (100) and in which data-storing means is a ROM (100). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the measuring apparatus and associated method of Bell, so as to include a CPU, as taught by Noy et al., in order to enhance the recording capabilities of the measuring apparatus.

Response to Arguments

8. Applicant's arguments filed on March 13, 2006 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The prior art cited on PTO-892 and not mentioned above disclose a measuring device:

Tanguy (US 2,842,852)

Conrad (US 2,418,576)

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tania C. Courson whose telephone number is (571) 272-2239. The examiner can normally be reached on Monday, Wednesday and Thursday from 10AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego Gutierrez, can be reached on (571) 272-2245.

The fax number for this Organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DIEGO F.F. GUTIERREZ
SUPERVISORY PATENT EXAMINER
GROUP ART UNIT 2859

TCC
May 30, 2006

ATTACHMENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended) An apparatus for measuring the distance traveled along a fixed, arcuate path by a movable object, said apparatus comprising:

a member movable along said path ~~a fixed, one-dimensional path~~ to a position along said path corresponding to the relative position of the object;

a plurality of spaced electrical contacts insulated from one another and positioned along at least one side of said path;

data-storing means operatively connected to said plurality of contacts, said data-storing means including a corresponding plurality of memory locations each of which stores a preset, different distance-measurement data and each of which is respectively operatively connected to one of said plurality of contacts, each of said distance-measurement data stored respectively in said plurality of memory locations being uniquely respectively associated with one of said plurality of contacts along said path to which said memory location is operatively respectively connected; and

output means operatively connected to said data-storing means;

said movable member being effective as it moves along said path to engage one of said contacts, thereby to cause only the distance-measurement data stored in the one of said memory locations then operatively connected to said one of said contacts to be applied to said output means

Claim 2 (previously presented) The apparatus of Claim 1, in which said output means is a display device.

Claim 3 (previously presented) The apparatus of Claim 1, in which said output means is a CPU.

Claim 4 (~~withdrawn~~ CANCELLED) The apparatus of Claim 1, in which said contacts are arranged in an arcuate path.

Claim 5 (currently amended) The apparatus of Claim 1 ~~4~~, in which said movable member is connected at one of its ends to a voltage source and its other free end is movable along said arcuate path to make electrical contact with one of said contacts.

Claim 6 (withdrawn) The apparatus of Claim 1, in which said contacts are arranged in a rectilinear path.

Claim 7 (withdrawn) The apparatus of Claim 6, in which said member is movably axially along said rectilinear path for making contact with aligned pairs of said contacts at each of its ends.

Claim 8 (previously presented): The apparatus of Claim 1, in which said data-storing means is a ROM.

Claim 9 (previously presented) The apparatus of Claim 1, further comprising a voltage source, said member being effective when in electrical contact with one of said contacts to an associated one of said memory locations in circuit arrangement with said voltage source.

Claim 10 (previously presented) The apparatus of Claim 9, in which said output means is a display device.

Claim 11 (previously presented) The apparatus of Claim 9, in which said output means is a CPU.

Claim 12 (~~withdrawn~~ CANCELLED) The apparatus of Claim 9, in which said contacts are arranged in an arcuate path.

Claim 13 (~~withdrawn~~ CANCELLED) The apparatus of Claim 12, in which said movable member is connected at one of its ends to said voltage source and at its other free end is movable along said arcuate path to make electrical contact with one of said contacts.

Claim 14 (withdrawn) The apparatus of Claim 9, in which said contacts are arranged in a rectilinear path.

Claim 15 (withdrawn) The apparatus of Claim 14, in which said member is movable axially along said rectilinear path for making contact with said pairs of contacts at its ends.

Claim 16 (previously presented) The apparatus of Claim 9, in which said data-storing means is a ROM.

Claim 17 (currently amended) A method for determining the distance traveled by a movable object along a fixed, arcuate path, said method comprising the steps of:
arranging a plurality of fixed, spaced and insulated electrical contacts along at least one side of ~~a single, one-dimensional~~ said arcuate path;
moving an electrically conductive member along said path by an amount representative of the relative movement of said object, thereby causing said movable member to make electrical contact with one of said contacts;
storing respectively a corresponding plurality of different preset distance-measurement data in a corresponding plurality of data-storing locations in a memory respectively operatively connected to said plurality of contacts, the distance-measurement data stored

in said plurality of data-storing locations being respectively uniquely associated with one of said plurality of contacts; and

causing the distance-measurement data stored in the one of said data-storing locations associated with and electrically operatively connected to the one of said plurality of contacts then contacted by said movable member to be applied to an output device.